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PROCEEDINGS
OF THE
Allahabad Medical Society.

Vol. I.]

AUGUST, 1882.

[No. 3.

SOCIETY NEWS.

THE Seventh Monthly Meeting of the Society was held at the residence of Surgeon-Major W. Ashton, A.M.D., on Friday the 4th of August, at 8 P. M.

PRESENT:

Deputy Surgeon-General J. HENDLEY, M.R.C.S., C.B., <i>President for the Command.</i>	
Surgeon-Major H. S. SMITH, M.B., T.C., D.	Surgeon D. ST. J. GRANT, M.D., T.C., D.
Surgeon-Major W. ASHTON, M.B., T.C., D.	Dr. G. D. McREDDIE, M.D., Brux.
Surgeon G. C. HALL, M.R.C.S., Eng.	Surgeon A. J. PEYTON, M.B., T.C., D.
Surgeon JULIAN SMITH, M.B., Ed.	
Surgeon SHIRLEY DEAKIN, F.R.C.S., Eng., <i>Joint Honorary Secretary.</i>	

The next Meeting of the Society will be held on the 1st of September. Gentlemen who wish to read papers or to exhibit specimens are requested to communicate with the Honorary Secretaries if possible a week beforehand. All communications for the Honorary Secretaries or regarding the Proceedings to be addressed, "Villa Italiana, City Road, Allahabad, North-Western Provinces, India."

In order that the Meetings might be conducted in a more formal manner, it was resolved that in future the following should be the order of procedure:—

- (1) The President having taken the chair, the minutes of the previous Meeting shall be read and confirmed.
- (2) All letters of apology for non-attendance and other letters relating to the business of the Society shall be read and discussed if necessary, and orders passed thereon.
- (3) One of the Secretaries shall state the programme for the evening, and the ordinary business shall then be proceeded with.

(4) Silence shall be observed during the reading of papers and during the subsequent discussion by all but the Member who is addressing the Meeting.

The Joint Honorary Secretary reported that the application to form a North-Western Provinces and Oudh Branch of the British Medical Association, which was signed by upwards of fifty gentlemen, had been despatched to the General Secretary of the Association. He regretted that it would not reach England in time to be laid for the Worcester Anniversary Meeting, which would be held from the 8th to the 11th August.

ORIGINAL COMMUNICATIONS.

SOME REMARKS ON SICKNESS AND MORTALITY AMONGST CHILDREN, MORE ESPECIALLY WITH REFERENCE TO EDUCATION.

By G. D. McREDDIE, M.D., Brux., M.R.C.S., Eng.,
Civil Surgeon, Purnabgurn.

The subject on which it is sought to throw some light is, what are the effects of climate in India on the constitutions of children? That they show sooner than adults the effects of climate may be expected when we consider that tissue growth is in active progress, rendering the system highly susceptible to climate and other conditions which would have no effect on the fully developed organism. Hence it is found that the prolonged high temperature prevailing in the plains of India tells detrimentally on the constitutions of children, inducing debility and anæmia, and thus predisposing to organic or functional disease which either proves fatal in early life, or often entails an undermined constitution ill adapted for much mental or physical effort. We cannot give statistics of sickness, but statistics of mortality are available. Take the report of the Sanitary Commissioner with the Government of India. In the returns for 1878, the statement of the mortality of European soldiers' children shows that the ratio of deaths in the Bengal army under six months was 363 per 1,000, between six months and one year 204 per 1,000, falling to only 6

per 1,000 at the age of six and rising to 12 between the ages of seven and fifteen. In 1877 the same statement shows a mortality ranging from 233 per 1,000 for children up to six months to 4 per 1,000 for those between seven and fifteen years of age. In 1876 the ratio for children under six months was 270 per 1,000, falling to 9 per 1,000 for those between seven and fifteen years old.

The ratio of deaths in the United Kingdom is given generally as 250 per 1,000 for children under one year, and the same for ages between two and fifteen years; but it is to be remembered that phthisis and other chest affections, not prevalent in this country, account for the high mortality after infant life is passed.

The ratio of deaths for native children in this country is given in the report of the Sanitary Commissioner for the North-Western Provinces and Oudh. Taking the year 1880, the deaths of infants less than one year was 178 per 1,000, of children from one to fifteen years 18 per 1,000.

The mortuary returns for European soldiers' children thus do not give a high mortality for the years when education begins—that is, after seven years of age; but it may be pointed out that the extent of sickness is not, and cannot be, given in general returns; and hence on this subject the experience of the Profession must be relied on to bear out the fact that European children do suffer from a hot climate, and that it is highly desirable, when practicable, that they should be removed from the plains during the hot months after the age of eight or nine. It would be well if statistics were procurable giving the ratio of mortality of children in schools in Hill Stations. Perhaps such statistics are available. The Sanitary Commissioner's returns do not give the mortality of European soldiers' children located in the hills apart from those located in the plains. It may, however, be confidently stated that there is a consensus of medical opinion as to the great advantage of a hill climate for children after the age indicated.

It may be said that a change to a cool climate will insure strength of body, and that with physical strength will come mental vigor. It seems, therefore, the duty of the Profession to press the subject on the attention of Government with regard to

Government educational institutions for children of European descent—that it is highly desirable from a hygienic point of view that the pupil should be located in the hills during the summer months. If all the pupils of such institutions cannot be removed to Hill stations, it may be recommended that a certain number be selected by the medical attendants for transfer to the hills. Even such a measure will prove beneficial, as selections could be made in rotation, thus giving all the children the benefit of change in course of two or three seasons.

Nor is it only with regard to Government that representations are called for. The subject of children not being kept too long in the plains needs often to be pressed on the attention of parents and guardians who may not regard as of much import, signs of ill-health which are avoidable by timely removal to a hill sanatorium.

THE EDUCATION OF EUROPEAN CHILDREN IN INDIA: A PHYSIOLOGICAL PROBLEM.

By SURGEON SHIRLEY DEAKIN, F.R.C.S., Eng., S. Sc. C., Camb.,
I.M.D., *Junior Civil Surgeon, Allahabad.*

Now that Government has appointed an Education Commission to inquire into the subject of general education in India, the present time is opportune for bringing the medical aspect of the education of European children in India before the Society, especially as the Commission is to hold a Meeting in Allahabad on the 14th instant. This evening I wish to confine myself specially to the consideration of the question of the education of *European and Eurasian* children.

The Venerable Archdeacon Baly, late of Calcutta, took great interest in promoting the education of European and Eurasian children, and some three years ago he suggested a scheme for carrying this most desirable object into effect. The main point of his scheme was, as far as I remember, the instituting of large schools at the principal centres inhabited by Europeans, such as Allahabad, Meerut, and other large plain stations, and the utilizing of such schools as might be already in existence. Archdeacon Baly showed

that in the Bengal Presidency provision would only require to be made for about seven thousand children, exclusive of Calcutta: the proposal, therefore, would not make such an excessive demand on the finances of the country as might at first be supposed: it is consequently within a "measurable distance" of the practicable. The chief objection I have to the Archdeacon's scheme is the very serious one that he proposed to educate European and Eurasian children in the plains—a proposal opposed to all the teaching of recent medical experience. I maintain, that if Government is justified in undertaking to provide for the education of the young persons of the dominant races in this country so as to render them useful citizens, and valuable as aids to the maintenance of British *prestige* and supremacy in India, the more thoroughly and efficiently that education is carried out, the better. In these days of competitive examinations the Public needs to have the truth impressed upon it that the proper education, *i. e.*, 'the leading up to manhood of the body,' is as important as the education of the mind.

Professor Bain objects to what he calls James Mill's 'over-grasping view' of education. He says: "Now, when we inquire into the meaning of physical education, we find it to be rearing of a healthy human being by all the arts and devices of nursing, feeding, clothing, and general regimen. Mill includes this subject and Mr. Herbert Spencer devotes a very interesting chapter to it in his work on education. It seems to me, however, that this department may be kept quite separate, important though it be" (*Education as a Science*).

I cannot now stop to discuss whether the mind of man is anything more than the secretion of that marvellously complex and highly-organised piece of mechanism—the human brain; or whether there is any stronger physiological evidence to be adduced to support the hypothesis of a spiritual part, whose function it is to secrete mental phenomena, than there is to support the hypothesis of the existence of a spiritual liver, whose function it is to secrete bile. I do insist, however, on the truth of the proverb—

"Mens sana in corpore sano."

A vigorous intellect we can only obtain by rearing the young under such physical and mental conditions as physiology has shown to be compatible with the attainment of perfect health.

Now, Gentlemen, I emphatically maintain that these conditions are not as a rule, and often cannot be, attained in the sweltering plains of India. Though, as I shall show further on, marvellous results may be obtained in the healthy rearing of young people in the plains under proper sanitary conditions—this is shown by the statistics of the European Female Asylum in Calcutta—yet, on the other hand, we have the sad results of experience to contrast with these. The fearfully heavy mortality among the children of British soldiers in the plains shows but too truly what the practical result of educating young Europeans in the plains of India really is.

To me, it is a pitiable sight to see the pale and wan faces of young European children, as one mostly sees them, in this station, in the hot weather. Confined to the overcrowded two or three rooms of a house—which is often all the accommodation the parents are able to provide—from 8 A. M. to 6 P. M., with darkened windows and closed doors, often without any thermantidote to introduce fresh air into the vitiated atmosphere of the room, sometimes even without a punkah to keep this in motion and to cool the body, what wonder is it that children so kept lose all the buoyancy of childhood, sicken and die? During the hot weather good meat and vegetables are scarce, and to the inevitable evils of a hot climate, languor, and loss of appetite, is added the want of proper and nutritious food.

For the children of the rich, who can afford to provide ample room, good food, and thermantidotes* to keep the atmosphere pure and cool, a residence in the plains during the hot weather is frequently very trying, and often necessitates the steady daily exhibition of dialysed iron, iron biscuits and claret.

* Dr. Neale's new patent ventilating punkah, or "Chemical Lung," should be invaluable as providing a cheap and simple apparatus for purifying and cooling the air of small rooms.

Sir J. Fayrer, in his lecture on the Health of European Children in Bengal,* gives statistics of the Asylum for female European Orphans in Calcutta. Eurasian children are ineligible, and the figures are, therefore, very valuable as showing what can be done in the plains, and *à fortiori* so much the more in the Hills, to render the mortality among European children as small as that found in their natural climate.

From records of the Female Orphan Asylum, Calcutta, for eight years, 1863 to 1871, "it appears that 130 individuals have been under observation during this period, ranging in age from one to eighteen years, a daily average of about 65 girls. There have been six deaths.....The immunity these children have had from diseases peculiar to the country, and from any of a severe kind, is remarkable. There has been during the period under report, and for many years previously, no cholera, no diphtheria, scarlatina, croup, pleurisy, pneumonia, ophthalmia, typhus..... It would be difficult to find better results anywhere."

On the other hand, regarding the great mortality among European children in India, Drs. Goodeve and Birch write:—

"Without going too minutely into figures, it may be briefly stated that under five years of age the soldier's child dies in India at the rate of something like 140 per 1,000 of strength. Now the death-rate in England for this period of life is about 68 per 1,000, or less than one-half of the Indian rate; and under fifteen years it is about one-third. Dr. Townsend drew up a table some years ago which exhibits the contrast very plainly and to which I now add the Bengal figures for 1875:—

			England: the mean of 29 years.	Bengal soldiers' children, 1870.	Bengal soldiers' children, 1875.
Under 5 years	...	...	67.58	148.10	131.0
5 to 10	...	...	8.80	17.73	22.4
10 to 15	...	...	4.98	11.51	7.0

"Nor can the comparison be stigmatised as being unfair, for although the management of the soldier's child may be characterized

* Tropical Diseases, Fayrer, 1881, p. 327 *et seq.*

as indifferent, we have no approach to the actually bad management, the want, privation and exposure, to which multitudes of the children of the poor in England are subjected. A writer in the *Calcutta Review* (1866) observes: 'The mortality among soldiers' children of pure European race more than trebles that frightful death-rate which prevails among the infants of the poor at home.' The editor of the *British Medical Journal* (1878) thus contrasts the mortality of the soldier's child in India with that of children of the same age in London:

			DEATHS PER 1,000.			
			Under 1 year.	1 to 5 years.	5 to 16 years.	5 to 20 years.
India	...	...	314	104	20	..
London	...	...	185	35	...	5

"The statistics for the last two periods are not so arranged that comparison can be exactly made, but it is at all events quite certain that soldiers' children in India, between five and sixteen years of age, die with four times the rapidity which obtains among individuals varying between the ages of five and twenty in London."

"It is a deplorable fact that the measures which have so vastly reduced the soldiers' death-rate have not effected the same for their children, as the following figures prove:—

Children's mortality not reduced in conjunction with that of the soldiers.

Average death-rate of children per 1,000 per annum. { 68·83 during 4 years (185-54), Dr. H. Macpherson.
94·41 " 6 " (1864-69), Sanitary Commr.
94·58 " 5 " (1868-72), Dr. Bryden.

"We must therefore look elsewhere than to general external sanitary conditions to account for the excessive rate of which soldiers' children die in India," although Miss Nightingale says: "children are, as it is well known, the very touchstone—the living tests—of sanitary conditions, or sadly, but too often, the dying and death tests of *insanitary* conditions."

Although, then, it is generally held that the climate of India need not be injurious to children under six or eight years of age, we see that, as a fact, among the children of poor Europeans, at least, the mortality far exceeds that found in Europe. "Beyond these

ages all are agreed that physical and moral degradation occur" (*Goodeve and Birch*). The child then "exhibits the necessity for change of climate by emanating and out-growing its strength" (*Sir R. Martin*). This latter authority goes so far as to say that the educating of European children in the plains is an 'altogether cruel and impracticable endeavour.' He states "that older children" exhibit a restlessness and mobility of the nervous system—a busy idleness—beyond their age, as compared with the habits of children of the same ages born and bred in England. There is also a marked disposition to relaxation and to a loose relaxed state of the joints in such children, and to consequent lateral curvature of the spine."

It is popularly believed that Europeans cannot colonise in the plains of India, as they die out in the third generation. Whether the statement be true or not I am not prepared to say, but I believe that all here will agree with me that the climate is inimical to the vigorous development of our race.

On the other hand, the experience of Asylums in the Hills for soldiers' children show, as Dr. Birch states, that "beyond all cavil, European children may be born and brought up in the hills in a state of physical health not inferior to that of those who have been wholly reared in Europe. I have known many such; but unless advantage be taken of some of the excellent institutions which are available, the moral tone is not likely to be of a high order."

The fact that the education of all European and Eurasian children in the hills, at least during the hot season, would involve the separation of parents and children, should not be allowed to militate against a scheme such as I suggest, since all parents in India who can possibly afford—often at the sacrifice of the most rigid personal economy and discomfort—to send their children to Europe to be educated, do so, feeling that the temporary severance of family ties is a painful duty that they owe to their children. With the rapid development of light railways and tramways to Hill Stations, the expense and difficulty of migrating to and fro will be greatly lessened. In the case of parents who could not

afford to pay for their children's education or travelling expenses, the visits of the children to their parents might be allowed once in two or three years ; but this is a mere matter of detail. If Government is to carry out a comprehensive scheme of education in the hills, new sites should be selected for the schools, since all existing Hill Stations have insanitary surroundings of a most unsatisfactory kind. Native servants should, as far as possible, be done without.

A discussion followed the reading of the papers, on which *the President* referred to the great boon such institutions as Sir M. Biddulph's Hill Schools for Soldiers' Children were. He believed that children in the plains deteriorated both mentally and physically, and he doubted whether it was safe to subject children to the same degree of brain pressure in the plains as at home. Among European children in India there was a marked degree of quickness and of nervous irritability which was chiefly, though not entirely, due to the climate.

Dr. H. S. Smith strongly objected to schools in the present Hill Stations. When Civil Surgeon at Naini Tal, he had found that the mortality there among young children was excessive ; he would rather have a child of his living in any good plain station.

Dr. Peyton thought that children at school in the hills were not worked up to the high standard of English schools, nor subject to the same high pressure.

Dr. Julian Smith demurred from this, considering that boys were able to, and often did, work as well at schools in the hills as they could at schools in England.

The following resolution was submitted to the Meeting and passed :—

Agreed unanimously that this Meeting is of opinion that the education of European children in the plains of India during the hot weather is detrimental to their physical and mental development, and that it is desirable that they should be removed from the plains, at least during the hot weather, to schools in the hills, at new stations if possible.

CASE OF STONE IN THE BLADDER; LITHOLAPAXY; RECOVERY. SECOND OPERATION FIFTEEN MONTHS AFTERWARDS; DOUBLE PYELITIS; RENAL CALCULI; DEATH.

By SURGEON SHIRLEY DEAKIN, F.R.C.S., Eng., *Junior Civil Surgeon, Allahabad.*

Thakurdin, a Brahman, aged sixty, was admitted to the Colvin Hospital, Allahabad, on the 16th March, 1881. He had suffered from symptoms of stone for four years and was emaciated and feeble. Purulent and offensive urine was drawn off from the bladder.

First Operation, 27th March.—It would have doubtless been most advantageous to have put the patient under a course of treatment with a view to improving the condition of the urine; but in India the Surgeon's motto must often be "that thou doest do quickly:" since, if an operation is not done at once, the patient, apparently doubting the Surgeon's skill, will often abscond.

Chloroform was given to the patient from Junker's Inhaler, an invaluable and economic apparatus, the use of which is rarely followed by sickness. One ounce of chloroform only was used to keep the patient under during the fifty minutes the operation lasted. On passing a sound, purulent, offensive urine escaped along the side of the instrument; the bladder was, therefore, well washed out at once with a 1-80 solution of phenol (carbolic acid), Sir H. Thompson's extractor being used.

The stone, a large soft phosphatic one, with a hard white nucleus—Calcium carbonate?—was crushed with a new instrument, made for me by Weiss, resembling Sir H. Thompson's new instrument figured in the last edition of his work, but having the female blade more fully and widely incised, so as to prevent impaction; it was larger; the beak, which was much flattened from side to side, measuring No. 17, English scale, and the handle was made much wider, so as to afford a good purchase for the hand. I have found that the ribbed circular handle, rough projecting button of lock, and sharp-edged wheel of the Thompson lithotrite are liable to blister the hands and are not well adapted for the long sittings

of litholapaxy. I saw a new instrument that Weiss was making for Mr. Bigelow: it had a ball-shaped handle. This I objected to, pointing out to the maker the three faulty points seen in an ordinary lithotrite: (1) the end of the male blade should be long and pear-shaped, so that the palm of the hand may fit comfortably over it and obtain a good purchase; (2) the button should be got rid of; (3) the circular handle of the female blade should have an egg-shaped section, from above downwards, instead of the circular form now made: this would give a much better grasp and its shape would enable the operator to know at once the position of the beak of his lithotrite—an important point when the sliding button has been dispensed with. Mr. Weiss raised objections, such as the loss of balance and increase of weight. I see, however, that in Dr. Bigelow's last new instrument, Weiss has banished the two first faults, giving the pear-shaped handle and the ring lock. The oval body is still required to make a perfect lithotrite; a beak well flattened from side to side greatly facilitates the seizure of a stone.

To return to the operation. Fifteen drachms—900 grains—were removed in the sitting of fifty minutes. The patient bore the operation well. According to my custom I applied hot fomentations to the abdomen, ordering a mixture—pot. bicarb. gr. 30, ext. bellad. gr. 1-4, tr. opii m. 5, inf. buchu fl. un. 2—three times a day.

28th.—Doing well; had slight fever; passed urine.

29th.—No tenderness on pressure over bladder; no fever; has a little difficulty in passing water, which is fairly clear; tongue moist; bladder to be washed out again to-day. Diet four pints of milk. Passed 70 grains of *débris* yesterday, 15 grains to-day. Temp. morning 97·8, evening 99·0. Pulse 84. Sp. gr. of urine 1006; one-sixth albumen. Total weight of *débris* 985 grains.

30th.—Passed water freely; no pain nor tenderness. Temp. evening 101·6. P. 96.

On the 31st the temperature reached 102; 100·2 on the 1st. Ten-grain doses of quinine—Indian—were given. The man was

discharged, cured, from hospital on the 5th of April, the eighth day after operation.

Second Operation.—The patient returned to hospital on the 26th July, 1882, fifteen months after the first operation, complaining of symptoms of stone, which had only recently recurred. On sounding I at once detected a small hard stone and concluded that it had recently descended from the kidney. As before, I washed the bladder out with Thompson's extractor, using borax water. I have discarded carbolic acid (phenol) for this purpose. Some pus came from the membranous part of the urethra.

I then introduced an ordinary Thompson's lithotrite and after several attempts seized a small stone and crushed it. I again tried to introduce a No. 16 extractor, but though I could easily pass a No. 12 sound and catheter, the almost straight extractor-catheter would not pass the membranous urethra, where it became impacted in the anterior wall. I fastened a No. 12 catheter to a simplex enema and filled the bladder, allowing the water to flow out, several times. A little *débris* came away, but as the stone was small and the fragments well pulverised, I left the remainder to pass in the urine. The patient bore the operation well. There was no complaint of pain or fever. The tongue, however, became dry and covered with a brownish fur. He gradually passed into a typhoid state and died on the 4th August, the eighth day after the operation.

Post-mortem—six hours after death. *Urethra.*—There was some slight effusion of blood outside the mucous lining of the membranous urethra, which was itself fairly healthy. The bladder was much thickened; the lining membrane in a chronically inflamed condition, presenting no signs of fresh inflammation, was smeared with flake of mucus. Both ureters were dilated to the size of a lead-pencil, the walls thickened and the lumina patulous. The left kidney was enlarged, its substance being made up of cysts containing purulent fluid; the upper half of the organ consisted of an abscess containing thick pus, in the midst of which was a calculus of branched-out line, hard and white, like the fragments found in the bladder. The right kidney presented a somewhat similar though less

advanced condition of pyelitis ; it also contained a calculus similar to that in the right kidney.

The urethra, kidneys, and ureters are exhibited before the Society. The Operations are the fifth and nineteenth of my cases of vesical calculi treated by crushing. At the time, the amount of *débris removed in fifty minutes* was the largest that I could find any record of.

REPORTS OF PREVIOUS MEETINGS.

INAUGURAL MEETING—(continued).

Mr. Deakin showed an interesting case of abdominal tumour in a European, aged forty-nine, a resident of Howrah. Eighteen months previously he had a severe attack of pain in the right iliac region whilst out for a drive. This disappeared and seven months afterwards he discovered a tumour in this part. The tumour is free from pain, is rounded and more or less tabulated, freely moveable, gives a sensation of fluctuation (especially when one hand is placed posteriorly over lumbar region below the last rib) and has a diameter of some six inches. The position of the tumour when the patient is standing reaches below the umbilicus, and tympanitic percussion between it and the liver was then distinct. The urine had sp. gr. of 1018 and was somewhat turbid, not flocculent. There was one-sixth albumen and a small fleecy, not viscid, deposit on the addition of liquor potassæ. The patient had been examined by various medical men and had been sent to Burmah for a sea trip. The tumour had been variously diagnosed as enlarged gall bladder, liver tumour, and hydatid of liver. The case appeared to be one of renal tumour, probably vesiculated, or dilated, kidney, since true hydatid disease of this organ is rare. There was no history of blood in the urine. The patient, though looking well and able to travel several hundred miles by rail, has lost some two stone in weight within the last three months. The history of the case suggested impacted calculus in the right ureter. The patient had noticed that the tumour was larger at some times than at others. As regards treatment, Mr. Deakin considered it advisable to watch the case, giving alkalies with bitter infusions

and buchu or uva ursi for the present. Should further treatment be necessary, an exploratory puncture with the aspirator should be made before any more serious operation was contemplated.

FIRST MONTHLY MEETING.

At a Meeting of the Society held at the residence of Surgeon Shirley Deakin on the 17th of February, 1882, at 5 P. M.,

PRESENT:

Deputy Surgeon-General J. HENDLEY, M.R.C.S., C.B., *President for the Command, in the chair.*

Surgeon-Major D. A. S. THORBURN, M.D., Ed.,	|	Surgeon G. C. HALL, M.R.C.S.,
Surgeon-Major F. A. DAVY, M.D., R.U.I.	|	Surgeon PEYTON, M.B., T.C., D.,
Surgeon SHIRLEY DEAKIN, I.M.D.,	}	<i>Honorary Secretaries,</i>
Surgeon SHERMAN BIGG, A.M.D.,		

It was resolved that future Monthly Meetings of the Society should be held in the evening after dinner at the houses of resident Members, in turn. The dinner provided should be plain and inexpensive in kind, so as not to interfere with the real business of the evening.

Mr. Deakin showed a myeloid tumour of the lower end of the femur, which he had removed by amputation through the lower third of the thigh, the day before. The patient, a young man of nineteen, had first noticed the tumour some ten months previously. Surgeon-Major Thorburn and Surgeon Bigg were present at the operation. As there was some difference of opinion as to the nature of the tumour, a puncture with a large trocar and canula was made. No fluid was obtained, and then a vertical incision over the inner side of the tumour exposed a thin plate of bone which was mistaken for the necrosed and eroded patella; it subsequently proved to be the lower end of the femur expanded to a shell covered with healthy cartilage; the new growth had extended through the expanded shell. The case exactly corresponded with the description given by Bryant (vol. II., p. 525). The operation was performed antiseptically; the patient made a rapid recovery.

Mr. Deakin also showed two cases of local cancerous growth which he was treating after the method described in the *British Medical Journal*, 1881, vol. II. In the one case the growth involved

the whole margin of the left orbit; the eyeball was completely destroyed, and there was a large circular ulcer with greatly raised and thickened edges. Morphia was injected hypodermically near the ulcer and then a paste of zinc nitrate (which is said by Mr. Marshall to be a less painful application than the chloride) and starch 1 to 3 was freely applied over the surface and margin of the ulcer. The growth was completely destroyed by five applications, but some of the malar bone was exposed and necrosed. The patient was an old man in indifferent health, and his friends, fearing that he would not recover, took him away to his home. The second case was a large serpiginous ulcer on the outer side of the left thigh, treated in the same manner. The man recovered, the case doing well.

SECOND MONTHLY MEETING.

The Second Monthly Meeting of the Society was held on Friday, 10th March, 1882, at 8 P.M., at the residence of Surgeon-Major H. S. Smith, I.M.D., Civil Surgeon.

PRESENT:

Deputy Surgeon-General J. HENDLEY, M.R.C.S., C.B., <i>President for the Command.</i>	
Brigade-Surgeon MUSCHAMP, M.R.C.S.	Surg.-Major D. A. S. THORBURN, M.D., Ed.
Brigade-Surgeon HOYSTED, L.R.C.S.I.	Surgeon-Major HUTCHESON, M.B., Glas.
Surg.-Major H. S. SMITH, M.B., T.C., D.	Surgeon DOWNIE, M.D., Ed.
Surg.-Major W. ASHTON, M.B., T.C., D.	Surgeon G. C. HALL, M.R.C.S.
Surgeon-Major F. A. DAVY, M.D., R.U.I.*	Surgeon E. L. PEYTON, M.B., T.C., D.
Surgeon SHIRLEY DEAKIN, I.M.D.,	} <i>Joint Honorary Secretaries.</i>
Surgeon SHERMAN BIGG, A.M.D.,	

ERUPTION CAUSED BY POTASSIUM IODIDE.

Mr. Bigg read the history of a case of anomalous eruption in a patient who was taking potassium iodide. The patient, a young man of twenty-two, suffered from loss of sexual desire after a venereal sore from which he had suffered four years previously. With the idea of giving the parts physiological rest, Mr. Bigg put his patient on potassium iodide. The exhibition of the drug was followed by an eruption of large nodes or lumps over the neck, thirty or forty in number, which disappeared when the drug

* Royal University of Ireland.

was stopped. A second administration of the drug in two and a half grain doses caused a recurrence of the eruption. Ammonium citrate was given in combination with the iodide.

Mr. G. C. Hall suggested that the combination with an ammonium salt was the cause of the iodism. He had seen no less than three cases in which this occurred when iodide was combined with ammonium carbonate. The dose of potassium iodide was only three grains. *Dr. Thorburn* always gave iodide with ammonium carbonate; he had not found any special tendency to iodism follow. *Mr. Deakin* often gave chloral hydrate to increase the effect of the iodide. He had seen the combination cause iodism. He thought that a bromide with belladonna and camphor was the preferable drug when physiological rest was required for the genital tract.

CHOLERA.

Mr. Sherman Bigg also read the notes of a case of cholera attended with the usual choleraic stools and cramps in the limbs, chiefly calves. The stools were passed unconsciously. There was barely suppression of urine. He treated the patient with carbolic acid and sulphuric acid drinks; he never gave alcoholic stimulants. The purging was arrested. After fourteen hours he had apparently recovered and was able to walk about, when next day vomiting set in and he died. There was no return of the diarrhoea. *Dr. H. S. Smith* said that he had seen a similar case. A *sais* (groom) was attacked at night. The purging was checked by two full doses of chlorodyne. Next morning the man was walking about and took food, but he died at 2 P.M. He thought that in many of these cases the chaste wife had much to say to the poisoning. *Mr. Deakin* said that when the 2-22nd (Cheshire) Regiment suffered severely from cholera, in July 1880, at Allahabad, many of the cases he saw with the late Surgeon-Major J. B. Hannah recovered from the choleraic symptoms, only to be carried off by cerebral effusion accompanied with febrile symptoms. He believed that not one case in which these symptoms appeared recovered. Every method of treatment, from leeches to blisters dressed with red iodide ointment, was tried without avail. The regiment lost about 50 out 60 cases.

SLOUGHING ULCERS.

Mr. G. C. Hall gave an account of three epidemics of *sloughing ulcers* which had occurred in the Allahabad Central Prison at Naini in 1872, 1876 and 1881. He considered that the ulcers were endemic to the site, since they were not prevalent in any part of the city or surrounding district. Acting on the idea that the disease was scorbutic or malarial in its nature, the prisoners were put on special diet, a liberal allowance of vegetables, ghi, sugar, and antiscorbutics, such as lime-juice, *amchur* (dried green mangoes) and dried tamarind pulp. The ulcers, which were largely confined to the legs, presented a foul yellow surface covered with a diphtheritic membrane. The disease spread with fearful rapidity, the whole calf sloughing in two days! He had tried everything that he could think of—caustics, nitric acid, carbolic acid, iodoform, alum, charcoal poultices, iodine, and a change of residence, taking the men out into camp. He proposed to try amputation. *Dr. Thorburn* suggested that flies might be answerable for the spread of the epidemic. *Dr. Peyton* inquired whether any of the men were opium-eaters. They were not. In reply to *Dr. Davy* *Mr. Hall* said that young and old alike suffered; a head-constable and a gardener had also been attacked. Those prisoners who suffered were getting good food and were in good health at the time of admission to the jail. There was no fever nor constitutional disturbance previous to the attack.

Mr. Hoysted inquired whether the epidemic occurred in the rainy season. An Assistant Surgeon had told *Mr. Hall* that the disease was common at Agra. The connection of such ulcers with enlargement of the spleen is well known, but this symptom was wanting in these cases. As a rule great enlargement of the spleen is not common about the Allahabad district—not, at least, to anything like the extent to which it is met with in Bengal. *Mr. Hall* had burned the clothing and bedding used by the infected prisoners and had fumigated the barracks with sulphur.

Mr. Deakin remarked that Diphtheria had been prevalent in the city of Allahabad in the early part of the present year. The disease might have been a true diphtheritic inflammation.

THIRD MONTHLY MEETING.

The Third Monthly Meeting of the Society was held at the residence of Surgeon-Major W. Ashton, A.M.D., on Friday the 14th of April.

PRESENT:

Deputy Surgeon-General J. HENDLEY, M.R.C.S., C.B., <i>President for the Command.</i>	
Brig.-Surg. W. WALKER, M.A., M.D., Aber.	Surg.-Major F. A. DAVY, M.D., R.U. I.
Brig.-Surg. J. HOYSTED, L.R.C.S., I.	Surgeon G. C. HALL, M.R.C.S., Eng.
Surg.-Major H. S. SMITH, M.B., T.C., D.	Surgeon E. L. PEYTON, M.B., T.C., D.
Surg.-Major W. ASHTON, M.B., T.C., D.	

Surgeon SHIRLEY DEAKIN, I.M.D., *Joint Honorary Secretary.*

There was a discussion on the subject of fever, in the course of which *Brigade-Surgeon W. Walker, Inspector-General of Prisons*, expressed grave doubts as to malaria being the cause of fever. For many years past he had been in the constant habit of going out fishing in the *terai* near Naini Tál, yet neither he nor his servants ever suffered from fever. This immunity he attributed to the fact that he took care that they were all well clothed and protected from almospheric changes.

Mr. Deakin showed a case of ankylosis of the hip joints, in a man of forty years of age, in which he had divided both necks of the femores subcutaneously, in June, 1880. A full report of this case with engravings will appear in a future number.

FOURTH MONTHLY MEETING.

The Fourth Monthly Meeting was held on Friday the 12th of May at the residence of Surgeon C. W. S. Deakin, I. M. D.

PRESENT:

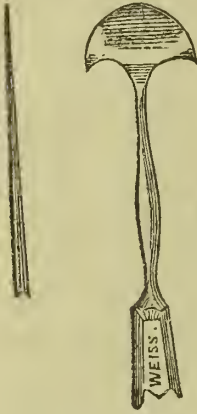
Deputy Surgeon-General J. HENDLEY, M.R.C.S., C.B., <i>President for the Command.</i>	
Brigade-Surgeon J. HOYSTED, L.R., C.S. I.	Surgeon T. P. O'CONNOR.
Surgeon G. C. HALL, M.R.C.S.	Surgeon D. ST. J. GRANT, M.D., T.C., D.
Surgeon J. HICKMAN.	

Surgeon SHIRLEY DEAKIN, I.M.D., *Joint Honorary Secretary.*

Mr. G. C. Hall showed a new cataract knife and described his operation as follows :—

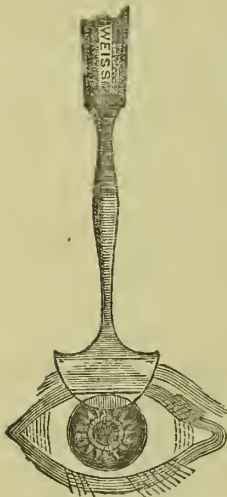
“In this operation it is proposed to make a linear incision, through which the lens may be extracted, without the disadvantage of any instrument being passed into the anterior chamber, all the incisions being made from outside. The knife I use is depicted here and is in shape like a small cheese-cutter. The operation is performed as follows: holding the eye with fixation forceps as usual,

the eye-ball must be pulled down and the knife held not quite at



right angles to the upper cornea sclerotic junction; the incision is then made by a sideways motion of the knife, beginning with its centre and then cutting outwards and inwards. On cutting through the sclerotic the iris immediately protrudes and is treated as in a Von Graeffe, the details of the operation being the same after the first incision. The great desideratum is of course a very sharp knife. At present I have only done three cases, having only three knives, one of which was not as sharp as it ought to have been. All three cases did

well, got very good vision; and presented no difficulty at the time of operation. I only mention this to show that the operation is an easy one. It is easier than a Von Graeffe and has not the disadvantage of a McNamara, in that iritis is not more prone to follow than after Von Graeffe's; whereas in McNamara's operation the non-performance of an iridectomy certainly conduces to iritis from the



bruising the iris undergoes. The advantages I claim are—(1) non-liability to wound the iris by piercing it as in Von Graeffe; (2) the absence of any instrument inside the eye, except, of course, of the pricker to open the capsule, and this might be avoided if the lens is taken out entire, as now proposed in Germany; (3) it being much easier than Von Graeffe, the certainty of making the incision in the right place; (4) the complete control over the size of the incision. The knife in question I also find a great improvement on the old iridectomy knife; it having no point renders it safer, there being no chance of wounding the lens."

Mr. Deakin read notes of two cases of elephantiasis scroti on which he had recently operated successfully. The second case will be reported fully in a later number. The patient suffered from pneumonia and recovered after secondary castration.

CLINICAL NOTES.

A Cheap Ophthalmoscope: how to make and use it.—To acquire the necessary skill it is very desirable that the student should possess an instrument, as it is difficult for him otherwise to obtain sufficient practice in its manipulation. The cost of an instrument probably prevents many students from obtaining one at the beginning of their work. It may, therefore, be worth while to mention that the use of the ophthalmoscope may be learned and dexterity with it acquired with an instrument which every student can make for himself at the cost of a few pence. A piece of looking-glass two inches long by one wide, with the corners rounded off, is all that is necessary. Paper should be pasted on to the back of it and over one-half of the front, and turned over the edge of the glass in the other half, so to cover the sharp edge. A small hole should be made in the paper at the back opposite the middle of the uncovered part of the mirror and the silvering scraped away at the spot. By the covered half of the glass the instrument may be held. With this simple ophthalmoscope and a two and a half or three inch lens the fundus, disc and vessels can be clearly seen. The illumination is of course feebler than with a concave mirror, but sufficient for the purpose—that of enabling the use of the instrument to be acquired. Emmetropic and hypermetropic eyes may also be examined with it by the direct methods.

By far the best mode of acquiring dexterity in the use of the ophthalmoscope is for the student to attempt to make a sketch of some fellow-student's optic disc. The instrument has to be laid down and readjusted at every stroke, and the repetition of the operation under the same conditions will very quickly enable him to do it with an accuracy which he is much longer in acquiring in the examination of patients when every occasion of use is under different conditions. In practising upon a fellow-student he has, it is to be presumed, an intelligent subject—a point of the greatest importance to the beginner. If he in his turn submits to a similar examination, he will be better able to exercise consideration for the patients whom he examines. Dilatation of the pupil is unnecessary, and indeed undesirable, for this practice.—*Gower's Medical Ophthalmoscopy*, p. 257.

Filaria in Lymph Scrotum.—On May 17th, 1881, Dr. Thin communicated for Dr. P. Manson, of Amoy, China, an unique example of lymph scrotum showing part of a mature filaria *in situ*.

In October, 1880, Dr. Manson operated on the subject of the disease—a Chinaman—who had suffered from symptoms of lymphatic obstruction for five years. Lymph was discharged at intervals from the usual and characteristic vesicles on the surface of the lower part of the scrotum. The groin glands on both sides were enlarged and indurated; the clear straw-coloured coagulable lymph contained embryo filaria, though none were found in the blood.

Dr. Manson before operating ventured to prognosticate that the parent filaria would be found in the part removed. He argued that, because the lymph was pale, clear, and straw-coloured, therefore, there had been no regurgitation of lymph through the inguinal glands, and no embryos could be found in the blood; therefore, those that appeared in the scrotal lymph must have come from a parent filaria on the distal side of the inguinal glands, possibly in the scrotum.

Dr. Manson, as he anticipated, found the parasite in active movement on the cut surface of the wound. Half of the animal lay in a dilated lymphatic, of the specimen exhibited before the Pathological Society, and is still there, the body having snapped across in an attempt having been made to remove it. It turned out to be a female. Dr. Manson insists on the thorough knowledge of the complete life history—at least of as much as is yet known of it—of the parasite, in order to appreciate the significance of the fact that wherever elephantiasis is endemic this parasite is found; that elephantiasis is endemic over the greater part of the globe inhabited by mankind; that it produces a group of diseases very common in these countries, which, though not frequently fatal, does at times kill and always gives rise to much pain, deformity, and inconvenience.

The parasite is the parent of an embryo hæmatozoon first found in chylous urine, by Wucherer, in 1866, and in the blood by Surgeon (now Surg.-Major) T. Lewis, A.M.D., in 1873, and named by him the *Filaria sanguinis hominis*. Dr. Bancroft, in Australia, discovered the mature animal in 1876, and Dr. Lewis found the parent worm in India. The mature worm has also been found in Brazil and in China. Cobbold has named it *Filaria Bancrofti*.

Only a small portion of the male worm has as yet been met with; it is smaller than the female, which is a long slender animal, resembling an animated piece of catgut, quite three inches long and only one-hundredth of an inch in breadth. The reproductive organs occupy almost the whole body. Under the microscope the vagina is seen to contain fully developed embryos resembling those found in the blood. The parasite is therefore viviparous.

Dr. Manson has proved that the exact habitat of the mature animal is the lymphatic vessels. In his specimen, lymph was seen to regurgitate from the dilated lymphatic when pressure was made over the inguinal glands. Now, though the embryos might possibly migrate from the blood vessels, it is impossible for the ovum, a perfectly passive body, to do so. Ova have been found in the lymphatics, and as they are too large to pass through the walls, it follows that the parent worm settles in the lymphatics. The embryo *filaria sang. hom.*, which measures only 1-3500 of an inch in diameter, the size of many of the lymph corpuscles which accompany them, have no difficulty in entering the minute vessels into which the different lymphatics divide; for the same reason, and by virtue of their vigorous movements, they enter the parenchyma of the gland, and emerging into the different vessels and passing through gland after gland, they at length pass through the thoracic duct into the general blood current. The *filaria sanguinis hominis* is a graceful snake-like animal, possessed of great activity; it measures about 1-90 by 1-3500 of an inch, is perfectly transparent and apparently structureless; the animal is inclosed in a very delicate sac about one-third longer than the body.

If a person whose blood is known to contain filaria be kept under constant observation, it will be found that during the day the filaria are as a rule absent from the blood; that about six or seven o'clock in the evening, "with military like punctuality," as Dr. Cobbold expresses it, "they march to their night quarters." The number increases towards midnight, until as many as one hundred may be counted in one drop of blood. They disappear towards morning, and between 9 A.M. and 6 P.M. it is rarely possible to find a single specimen.

Dr. Manson gives an ingenious explanation for this remarkable phenomenon. He argues that, as the parasite lives in the blood, its first step towards freedom and in development must be through bloodsuckers. As the parasite is confined to a limited portion of the earth's surface, he excludes fleas, lice, bugs, and leeches; there then remain mosquitoes and sand-flies, which latter, in ignorance of the nocturnal habits of the filaria, he had not at first excluded. As there are many varieties of mosquitoes in parts of the world where elephantiasis does not exist, it follows that only certain species are concerned in its propagation. He has satisfied himself that at least one species of *Culex* is an efficient host for the embryo filaria. The female only of this species, not the male, is possessed of an apparatus capable of piercing the skin; she is a small dark-brown insect, devoid of markings on the legs, abdomen, or thorax. Her head is small and dark, armed with a strong proboscis, bulbous at the end. At about 8 o'clock she proceeds in

search of food, fixing her proboscis in the first animal she comes across. Two minutes, if undisturbed, suffices to fill her stomach; she then retires to some shady place, if possible, in the vicinity of water, and during the next three or four days matures her ova and digests her meal.

This completed, she betakes herself to the water, deposits on its surface two small boat-shaped masses of eggs, and then dies. Should a female filaria of this species of mosquito bite an infected subject, the embryos find their way through the proboscis into the insect's stomach, where, though many perish, a favoured few survive and undergo a very interesting metamorphosis. The apparently structureless body becomes an animal about one-thirtieth of an inch long, indued with prodigious activity. Under the microscope, the head is seen to be crowned with three or four nipple-like papillæ; an alimentary canal and genital organs can be traced.

This metamorphosis of the filaria occupies from four to six days. How the parasite effects an entrance into the human body is still a matter of uncertainty. Dr. Manson considers that, provided as it is with a boring apparatus, it is capable of effecting its escape from the stomach of its dead host and of making its way out of the stomach of man into the tissues, where it has been introduced into that organ by means of food or water. Once in the stomach it soon bores its way to some part of the lymphatic system, and working up-stream in obedience to a strange instinct, reaches its permanent abode in some distant lymphatic. Helminthology affords instances of such migration in the cases of the trichina, the liver fluke, the giant strongyle, the bilharzia and numerous filaria. At the same time it would appear probable that a simpler method of obtaining access to the body would be in a way similar to that in which Guinea-worm enters, *viz.*, through the skin, in bathing. This mode of infection would accord with the greater frequency with which elephantiasis is found to attack the scrotum and lower extremities. The minute size of the embryo, however, allows the filaria to enter freely into the current of the blood and to pass through the glands into the general circulation, and it does not appear that the presence of the parasite is incompatible with the perfect health of the human host. Dr. Manson states that in countries where the parasite is endemic, it is found in about ten per cent. of the population; among this ten per cent. lymph scrotum, varicose glands and chyluria are common, while they are rare among the non-infected 90 per cent.

Lymph scrotum after removal is often followed by development of the disease in the leg, or even years after in the operation flaps.

An objection to the filaria theory of elephantiasis is that the parasite does not always give rise to the disease. Dr. Manson,

however, brings forward remarkable evidence to show that the disease is only caused by the miscarriage of the mature parasite. Surgeon-Major Lewis describes the development of the embryo filaria in the uterus of the parent and says that it does not burst, but stretches the choroidal envelope, converting this into a sac or sheath. Dr. Manson has satisfied himself that this mode of sac formation occurs in an hæmatozoon inhabiting the pulmonary artery of the common crow of South China.

Now, since the diameter of the ovum greatly exceeds the diameter of the embryo filaria, being 1-500th by 1-750th, or five times greater, it is too large to pass through the glands, though it will pass through the larger vessels: hence it follows that, if the ovum pass into the lymph current, it will be arrested in the glands, and, being inert, will act as a plug or embolon, producing stasis of lymph. This process of embolism may go on until all the anastomoses of the lymphatic vessels connected with the part inhabited by the parent worm are blocked. In proof of this remarkable hypothesis Dr. Manson has on two separate occasions found the ova of *filaria sang. hom.* in the lymphatics. Cobbold too, and possibly Salisbury, have found ova, presumably similar, in the urine. In the second of Dr. Manson's cases the parent worm had inhabited its host for thirty-two years; he points out the likelihood of miscarriage during such a long life in an animal in which the generative functions are so active, and which inhabits a part of the host's body, such as the scrotum, exposed, and therefore liable to injury. In the lymph escaping from the diseased scrotum the young of the parasite may be found.

If the disease be localised in the leg, the lymph, not having passed through the glands, will be clear and straw-coloured. If the worm is located in the scrotum, much the same effect will ensue; but if she is in the pelvis, and should the lymphatics of the kidneys or urethra be obstructed, chyluria may ensue. In cases of lymph scrotum, when the lymph has passed through glands, some of them possibly connected with the alimentary canal, it will be chylous (galactocoele) or even sanguineous. The accumulation of a chylous fluid in the tunica vaginalis is often associated with filaria in the fluid or the blood, and is explained by the parasite being located in the lymphatics of the cord.

The onset of elephantiasis is frequently attended with great suffering. Sir J. Fayer states that there is high fever, intense pain in the lumbar region, the groins, the spermatic cord and testes, which become much congested and swollen, whilst acute hydrocele forms. This is often accompanied by sympathetic vomiting, nausea, rapid and erythematous swelling of the external parts; and if the extremities be attacked the swelling is very tense

and painful, accompanied by much effusion into the areolar tissue. The surface of the integument is much inflamed, and sometimes discharges a serous ichor or chyle-like fluid, according to the extent to which the lymphatics are engaged in the particular case.

The impossibility of permanent and thorough cure of elephantiasis is apparent. Much may be done by operative interference to relieve symptoms, but the disease is incurable. The prospect on the side of prevention is more hopeful; for if people who live in countries where the filaria is endemic would but cover their wells or water-jars with a netting sufficiently fine to keep out mosquitoes, or if they would empty out all water-jars daily, or if they filtered and boiled their drinking-water and boiled their bath-water, they would not get filaria or the disease it produces, nor elephantiasis.

In a paper by Dr. Prospero Sonsino, of Cairo, read before the Epidemiological Society of London, in May last, the author gave reasons for believing in the identity of the hæmatozoon described by him in 1874 with that found by Lewis, Manson, Aronjo and Dos Santos. He gave analyses of ten cases met with by him in Egypt. In two cases the patients suffered from hæmaturia. In five lymphuria was present. The attacks came on suddenly with great pain; the urine generally only contained fibrinous casts, due to the presence of coagulation of lymph in the bladder. It was only when these began to break down that micturition could be performed. In one case only, in every other respect identical with the five previously mentioned, no filaria could be found either in the blood or in the urine. Filarious lymphuria or hæmato-lymphuria differs from the lymphuria due to bilharzia in being intermittent with long intervals of apparently complete recovery; while bilharzia disease lasts for years, and when of long standing assumed the characteristics due to cystitis, and the urine was often associated with gravel or symptoms of stone in the other parts of the urinary tract. From observations recently made, Dr. P. Sonsino was able to confirm the observations of Manson and Myers regarding the nocturnal habits of filariæ, though he had been unable to notice the developmental changes seen by Lewis; he concluded that the mosquito probably played with filaria a part similar to that of some birds with respect to vegetable seeds.—*Trans. Patholog. Soc., p. 286; B. M. J., 2, 1882, p. 136; Fayrer, Tropical Diseases, Turner 138 cases of amputn. of scrotal tumour; Glas, Med. Jour., June, 1882 (with photographs).*

Animal Vaccination in India.—Animal vaccination continues to be carried on in Bombay, Poona, and Kurrachee, a total of 470 heifers having been inoculated last year with successful results in 456 instances. Thirty or forty animals were operated on month

by month. The months of August and September show a larger proportion of failures than any other months, while from January to June only one failure is recorded out of 236 operations. In Bombay animal lymph alone is kept up; in Poona and Kurachee both human and animal lymph is in use. The total cost of the animal vaccine arrangement was Rs. 2,700.

Note on the Antiseptic Treatment of Phthisis by J. Burney Yeo, M.D., Lond.—Since the delivery of my lecture, which was published in the Journal of July 1st, my attention has been directed to some very recent reports published in Germany bearing on the antiseptic treatment of phthisis. Dr. Frankel *Centralblatt*, June 10th, has been making experimental injections of antiseptic into the pulmonary tissues of animals, such as phenol, boracic acid, iodoform, aluminium tartrate, etc., etc.

The injections were not attended with any constitutional disturbance; and *post-mortem* examinations showed the existence of extravasations and simple inflammatory changes in the lungs, and in the later stages the formation of cicatricial tissue. On the strength of these results he proposes that similar injections should be made into the foci of disease and their neighbourhood, with the view of modifying the morbid process and of limiting its extension by cicatricial barriers.

In a patient with foetid expectoration he administered six injections, each of fifty minims, of a five per cent. solution of phenol. It excited no re-action and no cough, but had no effect on the expectoration. I mention these experiments, without for the present offering any opinion as to their value, merely to show the activity with which this subject is being investigated in Germany.

Professor Oertel of Munich, in a volume he has just published on the *Therapeutics of the Organs of Respiration*, devotes about 350 pages to the subject of "Inhalation;" in which he speaks highly of the use of a five per cent. solution of sodium benzoate atomised, *i.e.*, inhaled in the form of fine spray. He has observed a very cleansing effect to follow its use in the ulcerative lesions of laryngeal phthisis; and he infers from this that a similar favourable action may be exercised on the lesions of more deeply seated parts, on the bronchial ulceration and softenings and on the walls of cavities. The expectoration is facilitated, increased at first and subsequently diminished. Mycotic processes and decomposition of the secretions are arrested; and the absorption of secretions is thus favourably modified and is less likely to be pyogenic or specifically infective. He also points to the importance of the thorough cleansing of the mouth and fauces; the appetite is thereby improved

and the stomach is spared the infliction of decomposing oral secretions. The swallowing of a certain amount of the solution he considers of great value, as he believes it operates in diminishing the fever. He duly discredits the marvellous results claimed for this plan of treatment by Rokitansky; but sees no reason to deny correctness of Schüller's impressions as to the results of his experiment on animals performed under conditions very different from those obtaining in the subjects of advanced phthisis. He, moreover, expresses a confident belief that by this and other antiseptic modes of inhalation very good effects will be attainable.—*B. M. Jour.*, 2, 1882, p. 125.

Stone after Gunshot Injuries of the Bladder.—Assistant-Surgeon J. M. Banister, U. S. A., records the successful removal by lateral lithotomy of a calculus and seven pieces of necrosed bone from the bladder of an Indian scout nineteen months after the reception of a gunshot injury. An incysted calculus could not be removed at the time. Fifteen months later, when the bladder trouble recurred, the man refused a second operation and subsequently died. At the autopsy the bladder was found firmly adherent in front to the pubes, where no recent bone disease existed, and to the rectum posteriorly, both this viscus and the bladder presenting a well-marked scar and both viscera being intimately adherent at the point.

Two calculi were found in the fundus of the bladder, a splinter of bone forming the nucleus in each case; they weighed 244 and 77½ grains troy respectively. Surgeon Otis, U.S.A., only relates three cases of calculus formations round bone, though Hennen asserts them to be common after gunshot wounds. In the *Medical and Surgical History of the War of the Rebellion* a list of 21 recorded cases is given; fifteen resulted from gunshot wounds, the remaining six in private practice from other causes.—*Amer. Jour. Med. Sci.*, 1882, p. 104.

Rivington on Rupture of the Urinary Bladder.—Mr. Walter Rivington, of the London Hospital, makes four cases of this lesion which he has met with in practice the peg on which to hang a very interesting paper on the history and records of this very fatal accident. All the four cases seen by himself ended fatally. The first case, a man of forty-nine, whose bladder was probably full at the time of the accident which caused the rupture, suffered from severe vomiting which nothing could check, yet there was no injury of the intestine. He died three and a half days after the accident.

Case 2, a lad of nineteen, whose bladder was full, had a cart-wheel pass over the pelvis; the pelvis was fractured. He died on the sixth day, when the wound in the bladder was found undergoing repair, the lips being glued together.

Case 3, twenty-four years of age, whose bladder was probably full, fell twelve feet into an area. He died on the fourth day, when the conjoined rami of the pubes and ischium were found to be fractured, and a hole was seen on the side at the antero-lateral aspect of the bladder.

Case 4, a man aged thirty-three, had a light cart pass over his abdomen. The bladder was empty at that time. The rupture was neither complicated with nor caused by a fracture of the pelvis. The quantity of urine drawn off by the catheter was small. On the second day symptoms of extravasation appeared and the patient died a few hours afterwards. *Post-mortem* examination showed that the peritoneum had been dragged from its attachments.

Mr. Rivington has collected from various sources a group of 225 cases, which are classified as follows :—

Intra-peritoneal ruptures, simple	...	...	105
Ditto complicated	...	...	24
Extra-peritoneal, simple and complicated	...	...	60
Intra-uterine ruptures in foetus (about)	...	...	5
Ruptures of uncertain position (about)	...	...	6
REPORTED CASES OF RECOVERY, GENUINE OR OTHERWISE	...	...	25
			225

The Lancet, 1882, 1, p. 944.

THE MEDICAL SERVICES.

Resolution of the Government of India, Department of Finance and Commerce,—No. 2018, dated Simla, the 29th June, 1882.

FEES FOR POST-MORTEM OR OTHER EXAMINATION.

READ again—

Resolution of the Government of India, in the Department of Finance, Nos. 1370 and 2208, dated respectively the 23rd June and 26th July, 1869, in which it was ruled that when a Medical Officer, other than a Civil Surgeon or officer in medical charge of a civil station, is summoned to give evidence in a criminal court, touching the result of a *post-mortem* or other examination conducted by him, in cases not falling within the ordinary discharge of his duties, he should receive a fee of Rs. 16 in addition to the usual expenses payable to a witness.

READ—

Letter from the Government of the Punjab, No. 336, dated the 29th April, 1882, submitting for confirmation a decision by that Government to the effect that the fee of Rs. 16 should be paid for conducting the *post-mortem* examination, whether or not the officer conducting it be required to give evidence in court regarding it.

RESOLUTION.—In supersession of the orders of 1869, the Governor-General in Council is pleased to declare that a Medical Officer not being a Civil Surgeon or an officer in medical charge of a civil station, shall be entitled to receive a fee of Rs. 16 for conducting a *post-mortem* or other examination in cases not falling within the ordinary discharge of his duties, whether or not he is required to give evidence in a court of justice in connection with such examination. It is, however, to be distinctly understood that when such an officer is required, under these circumstances, to give evidence in a court, he shall not be entitled to any remuneration in addition to the fee above sanctioned, other than the usual expenses paid to a witness.

[In the United Kingdom, every legally qualified practitioner who has attended at a coroner's inquest in obedience to a coroner's order is entitled to a fee of £1-1 for attending to give evidence where no *post-mortem* examination has been made, and to a fee of £2-2 for making a *post-mortem* examination and attending to give evidence.—ED.]

The following is a list of the Navy Medical Officers present at the bombardment of Alexandria: H. M. S. *Invincible*: Fleet-Surgeon Sweetman, Surgeons C. Pearson and M. Digan; H. M. S. *Alexandra*: Fleet-Surgeon D. M. Shaw, Surgeons J. C. B. Maclean and C. A. Macaulay; H. M. S. *Temeraire*: Staff-Surgeon J. Buckley, Surgeons H. E. F. Cross and W. Tail; H. M. S. *Monarch*: Fleet-Surgeon M. Rogers, Surgeons W. Brown and R. MacIvor; H. M. S. *Inflexible*: Fleet-Surgeon H. M. N. Sedgwick, Surgeon C. Drake; H. M. S. *Superb*: Fleet-Surgeon D. O'Connor, Surgeons A. R. Joyce and J. A. M. Adam; H. M. S. *Sultan*: Fleet-Surgeon G. Mair, Surgeons T. J. Preston and W. Eames; H. M. S. *Condor*: Staff-Surgeon W. H. Pusey; H. M. S. *Cygnet*:

Surgeon H. W. D. Walsh; H. M. S. *Decoy*: Surgeon T. Williamson; H. M. S. *Helican*: Surgeon G. W. Bell; H. M. S. *Penelope*: Staff-Surgeon E. Meade, Surgeon G. Smith; H. M. S. *Bittern*: Surgeon J. W. Davis; H. M. S. *Beacon*: Surgeon C. W. Hamilton.

EGYPTIAN CONTINGENT.

The following Medical Officers, in addition to those given last month, have been ordered to Egypt:—Brigade-Surgeon J. G. Faught, Surgeons-Major A. Fox and G. McNalty, and Surgeons Wood, Reynolds, Rainsford, and Sherman Bigg, A.M.D.; also Surgeon Adey, Bo. M. D.

The Officers of the Army Medical Department have erected a handsome white marble cross in the Anarkali Cemetery over the grave of the late Surg.-Major Robert Murphy, who died at Fort Lahore on the 1st September, 1881.

The undermentioned candidates, who appeared for examination in the native languages before the quarterly committees held on the 3rd July, 1882, are declared by the Board of Examiners, Calcutta, to have passed the higher standard in Hindustani, agreeably to the provisions of section 24, Bengal Army Regulations:—

Surg. J. J. MORRIS, M.D., R.U., I.	...	...	Army Med. Dept.
" G. H. D. GIMLETTE, M.D., R.U., I.	...	...	Ind. Med. Dept.
" C. P. LUKIS, M.B., LOND	...	...	Ditto.

ARMY MEDICAL DEPARTMENT.

LEAVE.

Name and rank.	Extent of leave.			Remarks.
J. HOYSTED, Brig.-Surg.	60 days	...	...	Prv.
K. W. CUMMING, Surg.-Major.	6 mths	...	...	P. A.
J. PARR, Surg.-Major.	6 mths	...	...	P. A.

APPOINTMENT.

Name and rank	Nature of appointment.	Remarks.
A. P. O'CONNOR, Surg.	Div. Staff. Surg., Allahabad ...	Offg. vice G. S. Bigg (Egypt).

TRANSFER.

Name and rank.	From		To	Remarks.
F. A. DAVY, Surg.-Major	...	India	...	Home.
W. VENOUR, Surg.-Major	...	Home	...	India.

INDIAN MEDICAL DEPARTMENT.

APPOINTMENTS, &C.

Name and rank.	Nature of appointment.	Remarks.
BENGAL.		
G. A. WARBURTON, M.B., Ed., Surg.	Services placed permanently at disposal of Govt. of India (Home Dept.)	
T. MULLANE, M.D., R.U.I., Surg.		
R. F. TAAFFE, M.B., Surg.	At disposal of Panjáb Govt.	Tempy.
W. CENTER, M.B., Ab., Surg.-Major.	Statist. Offr., Sanit. and Med. Dept.	Offg.
G. S. A. RANKING, M.D., Cantab., Surg.	Civil Surg., 24-Pergunnahs	Do.
H. T. GRIFFITHS, Surg.	Haraoti and Tonk. Polit. Agency	Vice DeFabeck, Offg.
L. CAMERON, M.D., Ed., Surg.-Major.	Civil Surg., Lucknow	Offg.
E. CRETIN, M.D., Lond., Surg.	Civil Med. Ch., Fyzabad	Do.
C. CAMERON, M.R.C.S., Surg.-Major.	Civil Med. Ch., Gonda	Do.
J. ANDERSON, M.B., Ed., Surg.	To act for Dr. Moir (on furlough),	Do.
J. LLOYD, M.D., R.U.I., Surg.-Major.	Inspg. Med. Ch., Etah	Do.
R. POWER, L.R.C.S.I., Surg.-Major.	Joint Med. Ch., Simla	Vice C. W. Owen (Egypt).
J. S. ROBERTSON, M.R.C.S., Surg.	Civil Surg., Meerut	Offg.
MADRAS.		
P. W. DALZELL, Surg.	Civil Surg., Akyab	Offg.
C. W. E. FOSTER, Surg.	Cen. Prison, Moulmein	Do.
D. SINCLAIR, Surg.-Ma- jor.	Inspg.-Genl. of Prisons, Burmah	Do.
D. ELCUM, Surg.	Resid. Surg., Hyderabad	Do.
BOMBAY.		
R. CALDECOTT, M.R.C.S., Surg.-Major.	Resident Surg., Indore	Offg.
WELLINGTON GREY	Chief Surg., J. J. Hospital.	
P. S. TURNBULL, M.D., Glas., Surg.-Mrjor.	Secy., Mily. Dept.	
F. BURNES, Surg.	D. D. Station Hospl., Ahmedabad.	
T. G. HEWLETT, M.R.C.S., Dy. Surg.-Genl.	Special duty, prevalence of Enteric Fever.	
J. PINKERTON, M.D., Glas., Brig. Surg.	Dy. Surg.-Genl., Bombay	Do.
H. BLANC, M.D., Montpel., F.R.C.P., Lond., Surg.- Major.	European Genl. Hospl.	Do.
A. MILNE, Surg.	2nd C. I. Horse and Pol. Agency, Malwa.	Do.
ADEY, Surg.	Egyptian contingt.	29th B. N. I.

LEAVE.

Name and rank.	Extent of leave or furlough.		Remarks.
R. F. HUTCHINSON, M.D. Ed., Brig.-Surg.	90 days	...	Priv.
C. J. JACKSON, M.R.C.S., Brig.-Surg. ...	2 mths. 19 days	...	A. P.
R. JAMESON, M.D., Glas., Surg.-Major...	1 year	...	P. A.
R. REID, L.R.C.S., Ed., Fatehgarh, Surg.-Major.	1 mth. 18 days	...	P. L.
J. C. WHISHAW, M.R.C.S., Surg.-Major,	1 mth. 10 days	...	P. L.
J. F. P. McCONNELL, M.B., Aber., Surg.-Major.	222 days	...	P. A.
A. G. GRANT, M.B., Aber., Surg.-Major,	3 mths.	...	M. C.
W. FINDEN, M.R.C.S., Surg.-Major. ...	Do.	...	M. C.
R. A., HOLMES, M.D., R.U.K.I., Surg....	60 days	...	P. A.
W. A. D. FASKEN, M.B., Aber., Surg....	61 days	...	P. A.
MADRAS.			
Nil.			
BOMBAY.			
Earle (26th Bo. N. I.) ...	...	1 year	M. C.

Births, Marriages, and Deaths.

BIRTHS.

CROMBIE.—At Darjeeling, on the 25th July, the wife of Dr. A. Crombie, Civil Surg., Dacca, of a son.

EUSTACE.—At Lowestoft, Suffolk, on the 31st July, the wife of Surg.-Major Eustace, A.M.D., of a son.

MARTIN.—On July 29th, at Richmond, Limerick, the wife of Surg.-Major W. T. Martin, M.D., A.M.D., of a daughter.

MCCRACKEN.—At Dugshai, on the 14th August, the wife of J. Alexander McCracken, Esq., Surg., A.M.D., of a daughter.

MARRIAGES.

ATTELEY-THORNE.—On the 13th instant, at St. Jude's Church, Southsea, Surg. John Attley, R.N., son of D. Attley, Esq., of Keel Hall Desert, Cork, to Katie Coppinger, youngest daughter of James Lyon Thorne, R.N., of Somerset House, and grand-daughter of the late Capt. William Thorne, 3rd Buffs, of Carline, co. Cork.

BREMNER-GRAHAM.—On July 12th, at Christ Church, Albany-street, Harry J. Bremner, Lieut., Royal Munster Fusiliers, eldest son of John Traill Urquhart Bremner, Dy. Insp.-Genl. of Hospls. and Fleets, Chatham and Walmer, to Edith, daughter of John Graham, Esq., of Enniskillen, Ireland.

COATS-KNIGHT.—On May 24th, at Ladysmiths, Natal, James Coats, M.B., Surg., A.M.D., to Augusta Emily, second daughter of the late Humphrey Evans Knight, formerly M.L.C. for Clip River Country, and grand-daughter of the late John Baver Stock Knight, Esq., of West Lodge, Dorsetshire.

TEMPLETON-ALLEN.—On July 11th, at Malone, R. Stancer, eldest son of Robert Templeton, Dy. Insp.-Genl., F.R.C.S.I., of Cranmore, Belfast, to Jane, eldest daughter of Arthur Chichester Allen, J.P., of Collin, co. Antrim.

WALKER-GARDE.—On July 24th, at Southsea, Surg.-Major John Walker, B.A., M.B., T.C., D., A.M.D., to Mirrie, daughter of Henry Prendergast Garde, Esq., Barrister-at-law.

DEATHS.

COTTON.—On the 24th instant, at the Royal Naval Hospital, Stone House, Insp.-Genl. John Cotton, M.D.

FASSON, MARGARET S., wife of Charles Hamilton Fasson, Dy. Surg.-Genl., at Bol-robin, Pitlochry, Perthshire, on July 22nd.

McVITTIE.—At Mominabad, on the 10th August, Hugh, son of Surg.-Major C. E. McVittie, 3rd Cavalry, Hyderabad Contingent, aged 5 months and 16 days.

SIMPSON.—On the 27th July, suddenly, at the residence of her son, Stuart J. Simpson, P.W.D., Etawah, Jean Cameron, relict of the late Charles Coruelius Stuart Simpson, Esq., M.D., in her 67th year.

TAYLOR.—On the 9th instant, at West Brighton-Crescent, Portobello, N.B., James Taylor, M.D., Dy. Insp.-Genl. of Hospls. and Fleets.

WILKES.—At Naini Tal, on Sunday, the 16th July, killed by a falling rock, Kate Eleanor Wilkes (Toonkey), the dearly-loved child of Surg.-Major Wilkes, A.M.D., aged 6 years and 4 months.

[N.B.—A charge of one rupee is made for the insertion of Births, Marriages, or Deaths.]

NOTES AND QUERIES.

THE S.S. *Hydaspes*, which arrived at Aden with all the troops and animals on board in good health and condition, was furnished with Dr. Neale's newly-invented Chemical Lung. The "Chemical Lung" has recently been patented in India. The form used at sea consists of a windsail, in which an endless towel moves. The bottom of this towel runs through a bucket, which contains a solution of "Little's Soluble Phenyle." This new method of constantly purifying the air seems to have proved highly effectual.

Castor-oil Plants as Fly-killers.—Observations made by M. Rafford, a member of the Société d'Horticulture at Limoges, show that a castor-oil plant having been placed in a room infested with flies, they disappeared as by enchantment. Wishing to find the cause, he soon found under the castor-oil plant a number of dead flies, and a large number of bodies had remained clinging to the under surface of the leaves. It would, therefore, appear that the leaves of the castor-oil plant give out an essential oil or some toxic principle which possesses very strong insecticide qualities. Castor-oil plants are in France very much used as ornamental plants in rooms, and they resist very well variations of atmosphere and temperature. As the castor-oil plant is much grown and cultivated in all gardens, the *Journal d'Agriculture* points out that it would be worth while to try decoctions of the leaves to destroy the green flies and other insects which in summer are so destructive to plants and fruit trees.—*Scientific American*.

Mongoose and Cobra.—At the July Meeting of the Asiatic Society, Calcutta, Mr. J. Cockburn, in a paper on the habits and instincts of animals, described the injuries inflicted on a cobra by a mongoose (*Herpestes auropunctatus*), which included the destruction of both poison fangs. Mr. Cockburn gave reasons for considering the destruction of the fangs to be an act of reason, not a mere accident.

Matrimony in Japan.—The Japanese Government has lately drafted new regulations for marriages. According to these, no man in the empire will henceforth be permitted to marry before arriving at the edge of twenty. Women, however, are to be privileged to marry at eighteen.

Cremation.—A Bill authorising the practice of cremation is about to be presented to the French Chamber of Deputies and will, it is said, be influentially supported.

Babu English.—[The following amusing record is the finding in the case of the rider of the horse that caused the accident in the case reported on page 25 (II., 3) of the Proceedings.—ED.]

Finding.—This case might well have been smothered at the very first commencement.

The accused is charged under section 289, I. P. C.

Five witnesses were adduced on behalf of the prosecution, and they each all state that the horse on the evening in question was seen galloping in a most frantic state, not in a manner as if it was being ridden, but as if the animal was out of its elements. The accused then was seen on the back of the horse crouching low and laying ahold of the mane of the horse, and the reins swaying hither and thither like the two bottles of wine dangling about the sides of the famous horse which John Gilpin rode at one time. It was also stated that the accused when seen on the horse was beside himself and was in a perturbed state of mind owing to the violent manner in which the horse was tearing along. Some of the witnesses depose that they saw the accused riding this horse constantly, but the horse never showed signs of mischievous propensities. This alone goes far to show the inapplicability of the charge contained in section 289, I.P.C., as against the accused; in other words, the accused is proved not to have possessed those ingredients which make up the charge, and therefore he must be brought as "not guilty." Coming nearer to actual facts, I find that the horse which has been the instrument in hauling his master over the coals was an old cast-off animal belonging to the accused's client, and that the horse ever since it was given away to accused by the then owner was constantly ridden by the accused for the past nine months, and during this interval never exhibited symptoms of an inborn fierceness or even of vicious propensities. On the evening in question, however, the animal probably took fright at something and scampered off in a scared and frantic manner, and the accused holding on to the animal like grim death was the only cause which saved the accused's life.

To bring now a charge against an accused under section 389, I.P.C., it must be proved by the prosecution that the accused *knowingly* or *negligently* omitted to take such order with any animal in his possession as is sufficient to guard against any probable danger to human life; it must be shown that the animal was always irrational, caused through wantonness or ferocity, or even that it had mischievous propensities. These essentials then were not even attempted to be brought home against the accused, and therefore the man must be held to be a non-participator in the freak his horse borrowed that evening.

This Court, under section 215, C.C.P., orders the immediate discharge of the accused.

ADVERTISEMENTS.

v

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